

Notice of Allowability	Application No.	Applicant(s)	
	10/051,909	HELENTJARIS, TIMOTHY G.	
	Examiner	Art Unit	
	Hope A. Robinson	1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/14/05.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ The drawings filed on 17 January 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>7/29/05</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>7/23/04</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S COMMENTS

1. The amendment filed on July 14, 2005 has been received and entered.

The objections and rejections made have been withdrawn by virtue of applicant filing a response that amended or cancelled claims.

REASONS FOR ALLOWANCE

2. The following is an Examiner's statement of reasons for allowance:

The applicant has claimed an isolated polynucleotide comprising: (a) a nucleotide sequence encoding a polypeptide having sugar transport protein activity, wherein said polypeptide is at least 91% identical to SEQ ID NO:32 or 36 or (b) the full complement of the nucleotide sequence of (a). In addition, the claims are directed to a cell comprising the recombinant DNA construct of a recombinant DNA/isolated polynucleotide. It is noted that page 12 of the instant specification provides a discussion of transformation. Although claim 10 reads on a cell in a plant, examples are provided that demonstrates transformation of dicot plants, thus, transforming a plant is supported within the instant specification (see Example 6). The written description and enablement guidelines were also reviewed in examining this application, however, the rejections were not made as the application discloses several species which are likened to *Arabidopsis thaliana* (see page 27 of the specification) and *Beta vulgaris* (see page 30 of the specification), recognized in the art as plant sugar transport proteins. The specification discloses that SEQ ID NO: 32 is 72.8% identical to *Arabidopsis thaliana* and SEQ ID NO: 36 is 68.9% identical to *Beta vulgaris*. The proteins of the claimed invention are also discussed with the domains that are conserved (see pages 26 and 29 which accounts for approximately 254

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residues). In view of this analysis, the specification is enabled and has adequately described a representative number of species for the claimed genus. Further, a search of commercial databases did not produce any prior art that suggests or teaches the above claimed invention. Thus, the claimed invention is novel and nonobvious over the prior art.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hope A. Robinson whose telephone number is 571-272-0957.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr, can be reached at (571) 272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hope Robinson, MS

Patent Examiner

HR
7/29/05

Kathleen M. Kerr
KATHLEEN M. KERR, PH.D.
SUPERVISORY PATENT EXAMINER